

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/616,009
Source: 1FW16
Date Processed by STIC: 9/2/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: <u>10/6/6,009</u>
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ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleic
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
Numbering The numbering under each 5th amino acid is misaligned. **Do not** use tab codes between numbers; use **space characters**, instead.
- 4 Non-ASCII The submitted file was **not saved** in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**
- 5 Variable Length Sequence(s) _____ contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
"bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
- 7 Skipped Sequences
(OLD RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES." response to **include** the skipped sequences.
- 8 Skipped Sequences
(NEW RULES) Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is **MANDATORY** if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
Response Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). **<220>-<223> section is required when <213> response is Unknown or is Artificial Sequence**
- 11 Use of <220>

Sequence(s) _____ missing the <220> "Feature" and **associated numeric identifiers and responses**.
Use of <220> to <223> is **MANDATORY** if <213> "Organism" response is "Artificial Sequence" or "Unknown." **Please explain source of genetic material in <220> to <223> section.**
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
"bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid



IFW16

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/616,009

DATE: 09/02/2005
TIME: 14:08:22

Input Set : D:\ISIS-5138.ST25.txt
Output Set: N:\CRF4\09022005\J616009.raw

3 <110> APPLICANT: Crooke, Stanley T.
 4 Lima, Walter F.
 5 Wu, Hongjiang
 7 <120> TITLE OF INVENTION: HUMAN RNASE H1 AND OLIGONUCLEOTIDE COMPOSITIONS THEREOF
 9 <130> FILE REFERENCE: ISIS-5138
 11 <140> CURRENT APPLICATION NUMBER: US 10/616,009
 12 <141> CURRENT FILING DATE: 2003-07-08
 14 <150> PRIOR APPLICATION NUMBER: US 09/409,926
 15 <151> PRIOR FILING DATE: 1999-09-30
 17 <160> NUMBER OF SEQ ID NOS: 72
 19 <170> SOFTWARE: PatentIn version 3.3
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 286
 23 <212> TYPE: PRT
 24 <213> ORGANISM: Human
 26 <400> SEQUENCE: 1
 28 Met Ser Trp Leu Leu Phe Leu Ala His Arg Val Ala Leu Ala Leu
 29 1 5 10 15
 32 Pro Cys Arg Arg Gly Ser Arg Gly Phe Gly Met Phe Tyr Ala Val Arg
 33 20 25 30
 36 Arg Gly Arg Lys Thr Gly Val Phe Leu Thr Trp Asn Glu Cys Arg Ala
 37 35 40 45
 40 Gln Val Asp Arg Phe Pro Ala Ala Arg Phe Lys Lys Phe Ala Thr Glu
 41 50 55 60
 44 Asp Glu Ala Trp Ala Phe Val Arg Lys Ser Ala Ser Pro Glu Val Ser
 45 65 70 75 80
 48 Glu Gly His Glu Asn Gln His Gly Gln Glu Ser Glu Ala Lys Pro Gly
 49 85 90 95
 52 Lys Arg Leu Arg Glu Pro Leu Asp Gly Asp Gly His Glu Ser Ala Gln
 53 100 105 110
 56 Pro Tyr Ala Lys His Met Lys Pro Ser Val Glu Pro Ala Pro Pro Val
 57 115 120 125
 60 Ser Arg Asp Thr Phe Ser Tyr Met Gly Asp Phe Val Val Val Tyr Thr
 61 130 135 140
 64 Asp Gly Cys Cys Ser Ser Asn Gly Arg Arg Lys Pro Arg Ala Gly Ile
 65 145 150 155 160
 68 Gly Val Tyr Trp Gly Pro Gly His Pro Leu Asn Val Gly Ile Arg Leu
 69 165 170 175
 72 Pro Gly Arg Gln Thr Asn Gln Arg Ala Glu Ile His Ala Ala Cys Lys
 73 180 185 190
 76 Ala Ile Glu Gln Ala Lys Thr Gln Asn Ile Asn Lys Leu Val Leu Tyr
 77 195 200 205
 80 Thr Asp Ser Met Phe Thr Ile Asn Gly Ile Thr Asn Trp Val Gln Gly

*Dose Not Comply
Corrected Diskette Neede*

P.5

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/616,009

DATE: 09/02/2005
TIME: 14:08:22

Input Set : D:\ISIS-5138.ST25.txt
Output Set: N:\CRF4\09022005\J616009.raw

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81      210          215          220
84 Trp Lys Asn Gly Trp Lys Thr Ser Ala Gly Lys Glu Val Ile Asn
85 225          230          235          240
88 Lys Glu Asp Phe Val Ala Leu Glu Arg Leu Thr Gln Gly Met Asp Ile
89          245          250          255
92 Gln Trp Met His Val Pro Gly His Ser Gly Phe Ile Gly Asn Glu Glu
93          260          265          270
96 Ala Asp Arg Leu Ala Arg Glu Gly Ala Lys Gln Ser Glu Asp
97          275          280          285
100 <210> SEQ ID NO: 2
101 <211> LENGTH: 293
102 <212> TYPE: PRT
103 <213> ORGANISM: Chicken
105 <400> SEQUENCE: 2
107 Met Leu Arg Trp Leu Val Ala Leu Leu Ser His Ser Cys Phe Val Ser
108 1          5          10          15
111 Lys Gly Gly Gly Met Phe Tyr Ala Val Arg Lys Gly Arg Gln Thr Gly
112          20          25          30
115 Val Tyr Arg Thr Trp Ala Glu Cys Gln Gln Val Asn Arg Phe Pro
116          35          40          45
119 Ser Ala Ser Phe Lys Lys Phe Ala Thr Glu Lys Glu Ala Trp Ala Phe
120          50          55          60
123 Val Gly Ala Gly Pro Pro Asp Gly Gln Gln Ser Ala Pro Ala Glu Thr
124 65          70          75          80
127 His Gly Ala Ser Ala Val Ala Gln Glu Asn Ala Ser His Arg Glu Glu
128          85          90          95
131 Pro Glu Thr Asp Val Leu Cys Cys Asn Ala Cys Lys Arg Pro Tyr Glu
132          100         105         110
135 Gln Ser Thr Asn Glu Glu His Thr Val Arg Arg Ala Lys His Asp Glu
136          115         120         125
139 Glu Gln Ser Thr Pro Val Val Ser Glu Ala Lys Phe Ser Tyr Met Gly
140          130         135         140
143 Glu Phe Ala Val Val Tyr Thr Asp Gly Cys Cys Ser Gly Asn Gly Arg
144 145          150          155          160
147 Asn Arg Ala Arg Ala Gly Ile Gly Val Tyr Trp Gly Pro Gly His Pro
148          165          170          175
151 Leu Asn Ile Ser Glu Arg Leu Pro Gly Arg Gln Thr Asn Gln Arg Ala
152          180          185          190
155 Glu Ile His Ala Ala Cys Lys Ala Ile Glu Gln Ala Lys Ser Gln Asn
156          195          200          205
159 Ile Lys Lys Leu Ile Ile Tyr Thr Asp Ser Lys Phe Thr Ile Asn Gly
160          210          215          220
163 Ile Thr Ser Trp Val Glu Asn Trp Lys Thr Asn Gly Trp Arg Thr Ser
164 225          230          235          240
167 Ser Gly Gly Ser Val Ile Asn Lys Glu Asp Phe Gln Lys Leu Asp Ser
168          245          250          255
171 Leu Ser Lys Gly Ile Glu Ile Gln Trp Met His Ile Pro Gly His Ala
172          260          265          270
175 Gly Phe Gln Gly Asn Glu Ala Asp Arg Leu Ala Arg Glu Gly Ala

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Input Set : D:\ISIS-5138.ST25.txt
Output Set: N:\CRF4\09022005\J616009.raw

176	275	280	285
179 Ser Lys Gln Lys Leu			
180 290			
183 <210> SEQ ID NO: 3			
184 <211> LENGTH: 348			
185 <212> TYPE: PRT			
186 <213> ORGANISM: Yeast			
188 <400> SEQUENCE: 3			
190 Met Ala Arg Gln Gly Asn Phe Tyr Ala Val Arg Lys Gly Arg Glu Thr			
191 1 5 10 15			
194 Gly Ile Tyr Asn Thr Trp Asn Glu Cys Lys Asn Gln Val Asp Gly Tyr			
195 20 25 30			
198 Gly Gly Ala Ile Tyr Lys Lys Phe Asn Ser Tyr Glu Gln Ala Lys Ser			
199 35 40 45			
202 Phe Leu Gly Gln Pro Asn Thr Thr Ser Asn Tyr Gly Ser Ser Thr His			
203 50 55 60			
206 Ala Gly Gly Gln Val Ser Lys Pro His Thr Thr Gln Lys Arg Val His			
207 65 70 75 80			
210 Arg Arg Asn Arg Pro Leu His Tyr Ser Ser Leu Thr Ser Ser Ala			
211 85 90 95			
214 Cys Ser Ser Leu Ser Ser Ala Asn Thr Asn Thr Phe Tyr Ser Val Lys			
215 100 105 110			
218 Ser Asn Val Pro Asn Ile Glu Ser Lys Ile Phe Asn Asn Trp Lys Asp			
219 115 120 125			
222 Cys Gln Ala Tyr Val Lys His Lys Arg Gly Ile Thr Phe Lys Lys Phe			
223 130 135 140			
226 Glu Asp Gln Leu Ala Ala Glu Asn Phe Ile Ser Gly Met Ser Ala His			
227 145 150 155 160			
230 Asp Tyr Lys Leu Met Asn Ile Ser Lys Glu Ser Phe Glu Ser Lys Tyr			
231 165 170 175			
234 Lys Leu Ser Ser Asn Thr Met Tyr Asn Lys Ser Met Asn Val Tyr Cys			
235 180 185 190			
238 Asp Gly Ser Ser Phe Gly Asn Gly Thr Ser Ser Ser Arg Ala Gly Tyr			
239 195 200 205			
242 Gly Ala Tyr Phe Glu Gly Ala Pro Glu Glu Asn Ile Ser Glu Pro Leu			
243 210 215 220			
246 Leu Ser Gly Ala Gln Thr Asn Asn Arg Ala Glu Ile Glu Ala Val Ser			
247 225 230 235 240			
250 Glu Ala Leu Lys Lys Ile Trp Glu Lys Leu Thr Asn Glu Lys Glu Lys			
251 245 250 255			
254 Val Asn Tyr Gln Ile Lys Thr Asp Ser Glu Tyr Val Thr Lys Leu Leu			
255 260 265 270			
258 Asn Asp Arg Tyr Met Thr Tyr Asp Asn Lys Lys Leu Glu Gly Leu Pro			
259 275 280 285			
262 Asn Ser Asp Leu Ile Val Pro Leu Val Gln Arg Phe Val Lys Val Lys			
263 290 295 300			
266 Lys Tyr Tyr Glu Leu Asn Lys Glu Cys Phe Lys Asn Asn Gly Lys Phe			
267 305 310 315 320			
270 Gln Ile Glu Trp Val Lys Gly His Asp Gly Asp Pro Gly Asn Glu Met			

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271          325          330          335
274 Ala Asp Phe Leu Ala Lys Lys Gly Ala Ser Arg Arg
275          340          345
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279 <211> LENGTH: 155
280 <212> TYPE: PRT
281 <213> ORGANISM: E.coli
283 <400> SEQUENCE: 4
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286 1          5          10          15
289 Pro Gly Pro Gly Gly Tyr Gly Ala Ile Leu Arg Tyr Arg Gly Arg Glu
290          20          25          30
293 Lys Thr Phe Ser Ala Gly Tyr Thr Arg Thr Asn Asn Arg Met Glu
294          35          40          45
297 Leu Met Ala Ala Ile Val Ala Leu Glu Ala Leu Lys Glu His Cys Glu
298          50          55          60
301 Val Ile Leu Ser Thr Asp Ser Gln Tyr Val Arg Gln Gly Ile Thr Gln
302 65          70          75          80
305 Trp Ile His Asn Trp Lys Lys Arg Gly Trp Lys Thr Ala Asp Lys Lys
306          85          90          95
309 Pro Val Lys Asn Val Asp Leu Trp Gln Arg Leu Asp Ala Ala Leu Gly
310          100         105         110
313 Gln His Gln Ile Lys Trp Glu Trp Val Lys Gly His Ala Gly His Pro
314          115         120         125
317 Glu Asn Glu Arg Cys Asp Glu Leu Ala Arg Ala Ala Met Asn Pro
318          130         135         140
321 Thr Leu Glu Asp Thr Gly Tyr Gln Val Glu Val
322 145          150          155
325 <210> SEQ ID NO: 5
326 <211> LENGTH: 216
327 <212> TYPE: PRT
328 <213> ORGANISM: Mouse EST
330 <400> SEQUENCE: 5
332 Gly Ile Cys Gly Leu Gly Met Phe Tyr Ala Val Arg Arg Gly Arg Arg
333 1          5          10          15
336 Pro Gly Val Phe Leu Ser Trp Ser Glu Cys Lys Ala Gln Val Asp Arg
337          20          25          30
340 Phe Pro Ala Ala Arg Phe Lys Lys Phe Ala Thr Glu Asp Glu Ala Trp
341          35          40          45
344 Ala Phe Val Arg Ser Ser Ser Pro Asp Gly Ser Lys Gly Gln Glu
345          50          55          60
348 Ser Ala His Glu Gln Lys Ser Gln Ala Lys Thr Ser Lys Arg Pro Arg
349 65          70          75          80
352 Glu Pro Leu Val Val Val Tyr Thr Asp Gly Cys Cys Ser Ser Asn Gly
353          85          90          95
356 Arg Lys Arg Ala Arg Ala Gly Ile Gly Val Tyr Trp Gly Pro Gly His
357          100         105         110
360 Pro Leu Asn Val Arg Ile Arg Leu Pro Gly Arg Gln Thr Asn Gln Arg
361          115         120         125

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Input Set : D:\ISIS-5138.ST25.txt
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364 Ala Glu Ile His Ala Ala Cys Lys Ala Val Met Gln Ala Lys Ala Gln
365 130 135 140
368 Asn Ile Ser Lys Leu Val Leu Tyr Thr Asp Ser Met Phe Thr Ile Asn
369 145 150 155 160
372 Gly Ile Thr Asn Trp Val Gln Gly Trp Lys Lys Asn Gly Trp Arg Thr
373 165 170 175
376 Ser Thr Gly Lys Asp Val Ile Asn Lys Glu Asp Phe Met Glu Leu Asp
377 180 185 190
380 Glu Leu Thr Gln Gly Met Asp Ile Gln Trp Met His Ile Pro Gly His
381 195 200 205
384 Ser Gly Phe Val Gly Asn Glu Glu
385 210 215
388 <210> SEQ ID NO: 6
389 <211> LENGTH: 26
390 <212> TYPE: DNA
391 <213> ORGANISM: DNA *invalid response - see item 10 on Error summary sheet*
393 <400> SEQUENCE: 6
394 acgctggccg ggagtcgaaa tgcttc 26
397 <210> SEQ ID NO: 7
398 <211> LENGTH: 28
399 <212> TYPE: DNA
400 <213> ORGANISM: DNA *same error*
402 <400> SEQUENCE: 7
403 ctgttctgg cccacagagt cgcccttgg 28
406 <210> SEQ ID NO: 8
407 <211> LENGTH: 29
408 <212> TYPE: DNA
409 <213> ORGANISM: DNA
411 <400> SEQUENCE: 8
412 ggtcttctg acctggaatg agtgcagag 29
415 <210> SEQ ID NO: 9
416 <211> LENGTH: 29
417 <212> TYPE: DNA
418 <213> ORGANISM: DNA
420 <400> SEQUENCE: 9
421 cttgcctgg ttcgcctcc gattcttg 29
424 <210> SEQ ID NO: 10
425 <211> LENGTH: 29
426 <212> TYPE: DNA
427 <213> ORGANISM: DNA
429 <400> SEQUENCE: 10
430 ttgattttca tgcccttctg aaacttccg 29
433 <210> SEQ ID NO: 11
434 <211> LENGTH: 34
435 <212> TYPE: DNA
436 <213> ORGANISM: DNA
438 <400> SEQUENCE: 11
439 cctcatcctc tatggcaaac ttcttaaatc tggc
442 <210> SEQ ID NO: 12

Please correct this error in subsequent sequences.

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/616,009

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TIME: 14:08:23

Input Set : D:\ISIS-5138.ST25.txt

Output Set: N:\CRF4\09022005\J616009.raw